

WHAT IS CLAIMED IS:

1. A method for monitoring and controlling a braking system of a vehicle, in which for the monitoring, at least one braking variable is recorded that represents a retarding force of at least one wheel brake to represent at least a slowdown of at least one wheel, the method comprising:

performing at least one suitable measure of (i) modifying the slowdown at the at least one wheel brake, and (ii) leaving an overall slowdown of the vehicle constant or essentially constant so that there is only insignificant change;

wherein the at least one suitable measure is performed as a function of at least one of a comparison of a recorded braking variable to at least one predefined threshold value, a driving situation, and an operating state of a vehicle component located in the vehicle during a braking procedure.

2. The method of claim 1, wherein the suitable measure includes at least one of: (a) a redistribution of the retarding force of at least one wheel brake to other vehicle brakes of the vehicle, (b) an unloading of the wheel brakes by a utilization of energy-absorbing components of the vehicle, and (c) a modification of the engine control.

3. The method of claim 1, wherein the braking variable represents a loading of the wheel brake during a braking activity, it being especially provided that, and the braking variable includes at least one of (a) a temperature variable representing a temperature at at least one friction partner of the wheel brake, (b) a friction value variable representing a friction value between friction partners of the wheel brake, (c) a wear variable representing a wear of a brake lining of the wheel brake, (d) a braking power of the wheel brake, (e) a current slowdown of the wheel brake to be recorded, and (f) a change over time of the loading of the wheel brake to be recorded.

4. The method of claim 1, wherein for the driving situation, performing at at least one of (i) recording a behavior over time of at least one of a braking command and a steering command, by at least one of the driver and a component in the vehicle for braking control or steering control, and (ii) performing plausibility interrogations with respect to the control and loading of components present in the vehicle.

5. The method of claim 1, wherein:

the vehicle component includes at least one of a battery, at least one wheel brake, and an engine, and

an operating state of the vehicle component includes at least one of a loading state of the battery, a functioning state of the wheel brakes, an instantaneous braking power at the wheel brakes, and an instantaneous engine power.

6. The method of claim 2, wherein for the redistribution of the retarding force to energy-absorbing components, a displacement of the braking force distribution from the wheel brakes of a non-driven axle to the wheel brakes of a driven axle is performed.

7. A device for monitoring and controlling a braking system of a vehicle, in which for the monitoring, at least one braking variable is recorded that represents a retarding force of at least one wheel brake to represent at least a slowdown of at least one wheel, comprising:

an arrangement to perform at least one suitable measure of (i) modifying the slowdown at the at least one wheel brake, and (ii) leaving an overall slowdown of the vehicle constant or essentially constant so that there is only insignificant change;

wherein the at least one suitable measure is performed as a function of at least one of a comparison of a recorded braking variable to at least one predefined threshold value, a driving situation, and an operating state of a vehicle component located in the vehicle during a braking procedure.

8. The device of claim 7, wherein the suitable measure includes at least one of: (a) a redistribution of the retarding force of at least one wheel brake to other vehicle brakes of the vehicle, (b) an unloading of the wheel brakes by a utilization of energy-absorbing components of the vehicle, and (c) a modification of the engine control.

9. The device of claim 7, wherein the braking variable represents a loading of the wheel brake during a braking activity, it being especially provided that, and the braking variable includes at least one of (a) a temperature variable representing a temperature at at least one friction partner of the wheel brake, (b) a friction value variable representing a friction value between friction partners of the wheel brake, (c) a wear variable representing a wear of a brake lining of the wheel brake, (d) a braking power of the wheel brake, (e) a current slowdown of the wheel brake to be recorded, and (f) a change over time of the loading of the wheel brake to be recorded.

10. The device of claim 7, wherein for the driving situation, performing at at least one of (i) recording a behavior over time of at least one of a braking command and a steering command, by at least one of the driver and a component in the vehicle for braking control or steering control, and (ii) performing plausibility interrogations with respect to the control and loading of components present in the vehicle.

11. The device of claim 7, wherein:

the vehicle component includes at least one of a battery, at least one wheel brake, and an engine, and

an operating state of the vehicle component includes at least one of a loading state of the battery, a functioning state of the wheel brakes, an instantaneous braking power at the wheel brakes, and an instantaneous engine power.

12. The method of claim 8, wherein for the redistribution of the retarding force to energy-absorbing components, a displacement of the braking force distribution from the wheel brakes of a non-driven axle to the wheel brakes of a driven axle is performed.